STATE OF ISRAEL

ECONOMIC PLANNING AUTHORITY

TARGETS AND OUTLINE OF THE FOUR-YEAR DEVELOPMENT PLAN 1963/64—1966/67

DRAFT PROPOSAL

JERUSALEM, JULY 1962

Table of contents

		Page
A.	Summary of main points	1
B.	The primary objectives of the development plan	8
C.	The assumptions underlying the plan	10
D.	The main principles of the plan	
	1. The growth of national product, and its composition	14
	2. Additional factors of production and raising productivity	16
	3. Private consumption	20
	4. Public consumption	22
	5. The savings rate	23
	6. The balance of payments	28
	7. The prevention of inflation and the stabilization of prices	34
	8. Estimates of resources and uses	34
Appendix A -	Economic developments expected on the basis of past trends	36
Appendix B -	Assumptions and methods	40
Appendix C -	Alternative assumptions of the extent of immigration, within the framework of the four-year plan	52

List of Tables

		Page
1.	Indicators of economic development, 1963 to 1966	7
2.	Provisional forecast of capital inflow, 1962 to 1966	11
3.	The distribution of marginal product, in the past and as planned	15
4.	Private consumption per capita in selected Western European and North American countries	21
5.	The financing of net investment, 1961 and 1966	24
6.	The required development of saving (public and private), 1962 to 1966.	25
7.	The savings rate in various countries	27
8.	The development of exports, imports and import surplus according to the proposed plan - 1961 to 1966	29
9.	The destination, of imports, according to the plan, 1961 to 1966	31
10.	The development of exports according to the proposed plan, 1961 to 1966	33
11.	Resources and uses according to the principles of the proposed plan	35
12.	Economic developments expected on the basis of past trends: resources and uses	37
13.	Economic developments expected on the basis of past trends: exports, imports and import surplus	38
14.	Gross investment, 1962 to 1966	46

A. Summary and Main Points

The development plan for the four years 1963 to 1966[1] has three major objectives:

1. The continued rapid growth of the economy, and the large-scale absorption of immigrants. This rapid growth will be expressed by an average yearly increase of 10 per cent in real national product, and will enable 70,000 immigrants to be absorbed each year.

2. The gradual reduction of the gap in the balance of goods and services. The plan will aim at a reduction in the import surplus, from about $ 400 million in 1961 to $ 250 million in 1966, with the intention of reducing the gap still further in subsequent years.

3. The development of the Negev and of Central Galilee

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(1) Fiscal years 1963/64 to 1966/68, subsequently referred to as 1963 to 1966.

The principal assumptions underlying the plan:

1. Population will increase each year by about 110,000 persons representing immigration (net of emigration), and natural increase; in all, total population will reach about 2.8 million by the end of 1966.

2. Total capital inflow into Israel will decline gradually

3. A trade agreement will be reached with the European Economic Community, under which Israel will be able to export its products to the Common Market without quota or tariff restrictions.

The establishment of a single, realistic exchange rate on February 9, 1962, was a pre-condition for the realization of the objectives indicated above However, it is clear that the fixing of a unitary exchange rate cannot by itself ensure this. In order to achieve the aims of the plan detailed policie must be laid down for the various aspects of the economy and steps must be taken to implement these policies.

Outline of policies proposed

The detailed development plan, which will be worked out at subsequent stages of planning, rests on several policy principles:

1. Full employment will be ensured, and the labour force will increase by a yearly average rate of 4½ to 5 per cent. If the population forecast materializes, the labour force will increase from 735,000 in 1961 to 925,000 in 1966.

The government will take steps to encourage the allocation of manpower and to provide for vocational training, in accordance with demand for labour as forecast in the development plan.

2. Investment, (excluding investment in ships and aircraft), will increase at an annual rate of about 10 per cent. (Total investment, including ships and aircraft will increase more slowly, by about 8 per cent per annum).

There will be no change, or perhaps a slight increase, in the capital intensity(1) of the economy. The average amount of capital invested per worker will however, continue to increase.

The criterion for determining investment priorities will be the contribution of the various branches, and of enterprises within each branch, towards increasing exports and replacing imports; this contribution will be assessed on the basis of the present exchange

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(1) Capital intensity is here used in the sense of capital - output ratio.

rate, without undue protection for local industries; however, there will be temporary protection of new enterprises, especially those in development areas, during their running-in period.

There will be intensified activity to increase the efficiency of enterprises and services, with the aim of substantially increasing productivity from year to year.

The planned 10 per cent annual average increase in the national product will be reflected at differing rates in the various branches: there will be a rapid increase in the product of industry and transportation and agricultural product will also continue to increase; on the other hand, the plan will aim at a slow growth in construction.

The plan requires a marked increase in the economy's rate of saving, as an essential condition for achieving the objectives set forth, and especially for reducing the import surplus. While the contribution of domestic saving to investment financing is at present negligible (and, in fact, negative), by 1966 domestic saving will have to finance about half of total net investment.

The government will take far-reaching measures to raise the level of all forms of savings among them good conditions for savers, and a wide variety of savings projects.

The government will also promote public saving in the form of budget surpluses from taxes and other levies from the public, which will be used for development or sterilised.

The plan allows for private consumption to rise at an average annual rate of 2.5 per cent per capita, or approximately half the rate of growth in recent years. The principal means of achieving this rate is by increasing savings (see section 5). If private saving does not increase rapidly, it will be neccessary to maintain a rather high level of direct taxes on personal incomes.

If consumption is to be increased faster than the average at low income levels, steps must be taken to limit even further the increase in consumption at middle and upper income levels.

Public consumption will be kept to an annual average increase of 6 per cent, or 1.5 per cent per capita.

This limitation will require public consumption to grow more slowly than in the preceding three years, when it reached 9.5 per cent (total) and 6 per cent (per capita), and the tendency towards a general expansion of public services must be restrained.

The reduction of the gap in the balance of goods and services is conditional upon an average yearly increase in exports of 20 per cent. Total exports will be $ 1,020 million in 1966, compared to $ 411 million in 1961.

The plan is based on an average annual increase in imports of about 9 per cent. Owing to a gradual increase in import substitution which will reach $ 68 million net in 1966, imports will rise less than would be the case at the present import component of domestic production. Import substitution will take place in those branches which can produce at prices able to compete with foreign products, mainly in industry. Total imports will be $ 1,270 million in 1966, as compared to $ 820 million in 1961.

10. Monetary and budgetary policies, and also wage and profit policies, will be directed at ensuring the greatest possible price stability.

On the basis of these principles, the plan will operate to ensure economic development according to the orders of magnitude indicated in Table 1. It should be emphasized that these figures show the trends of the program as four-year averages, and that the proposed plan does not, of course, exclude the possibility of year-to-year variations.

Table 1: Indicators of Economic Development, 1963 to 1966

(Real increase, per cent per annum)

Gross national product	9.5 - 10.0
Employment	4.5 - 5.0
Gross investment (a)	8.0
Aggregate private consumption	7.5
Per capita private consumption	2.5
Aggregate public consumption	6.0
Per capita public consumption	1.5
Exports (according to foreign exchange value)	20.0
Imports	9.0
Import surplus	- 9.5

(a) Including investment in ships and aircraft.

Proposal for Determining the Aims and Basic Principles of the Four-Year Development Plan - 1963/64 to 1966/67

The foregoing pages summarized the aims and guiding principles of the development plan for the years 1963/64 - 1966/67; these will now be described in detail. It must of course, be borne in mind that the definition of objectives and basic principles is only a first step in drawing up a detailed development plan. The plan will be worked out in detail after its objectives have been approved. The methods used are briefly described in Appendix B [1/].

B. The Primary Objectives of the Development Plan

The economic development plan for the years 1963 through 1966 will be directed towards the attainment of three major objectives:

1. Rapid economic growth

Economic growth should continue to be at a fast pace. This growth will be expressed by an average annual increase in national product of about 10 per cent and will allow for the absorption of about 70,000 immigrants each year. The additional manpower, both from immigration and from natural increase, will raise product by an annual rate of 4,5 to 5 per cent,

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1/ In the preparation of this work we were assisted by the Research Department of the Bank of Israel and by the Budget and Foreign Exchange Divisions of the Treasury. Special mention must be made of the projections of the national economy drawn up by Dr. A.L. Gaathon as a basis for planning, and of the work done in recent years at the Research Department of the Bank of Israel, in particular by Michael Bruno, Zvi Sussman, and Meir Merchav.

A further 5 per cent increase in product will be achieved by increasing productivity and the average amount of capital invested per worker.

2. The gradual reduction of the import surplus

The plan aims at reducing the gap in the balance of goods and services, and envisages a decline from about $ 400 million in 1961 to $ 250 million in 1966, with the intention of reducing the gap still further in subsequent years.

A central objective of the plan is to reduce Israel's dependence on large-scale capital imports. Economic independence is one of the basic aims of government policy, not only for economic reasons, but also because of important political and social considerations. Moreover, reduced dependence is liable to became a necessity, in view of the anticipated falling-off in capital inflows (see the forecast in Table 2).

3. Development of the Negev and Central Galilee

The development plan will stress the development of those regions which are at present under-populated, especially the Negev and Central Galilee districts.

The detailed development plans will lay down special incentives for the development of these regions.

C. The Assumptions Underlying the Plan

The attainment of the primary objectives outlined above is in no small measure connected with political and social developments outside the control of the government. Nevertheless, such factors markedly influence the economy. The following are the main assumptions underlying the plan. (If any of these assumptions change the outlines of the plan might, of course, also change.)

1. Increase in population by a yearly average of 110,000 persons

This growth will be due to immigration (less emigration) and to natural increase. The population will be approximately 2.8 millions at the end of the period covered by the plan (end of 1966).

The rate envisaged falls far short of that prevailing in the days of mass immigration. On the other hand, it is higher than that of recent years (1958 through 1961) during which population grew by an annual average of 3 per cent, mostly accounted for by natural increase, with net immigration contributing only about one third of the addition. The forecast rate of population growth is a four-year average and it is possible that there will be variations from year to year, owing to fluctuations in the volume of immigration. These variations will be taken into account when annual plans are formulated within the framework of the four-year plan.

2. The gradual decline in capital inflow

Capital inflow reached a peak of $ 493 million in 1961. This is expected to decline gradually.

Table 2: Provisional Forecast of Capital Inflow, 1962 - 1966

($ millions)

		1961	1962	1963	1964	1965	1966
(1)	Personal restitutions from Germany	111	120	115	115	75	60
(2)	German Reparations	88	60	45	25	25	-
(3)	U.S. Grant-in-aid	8	-	-	-	-	-
(4)	Transfers of Jewish Agency and other institutions	88	90	80	80	80	80
(5)	Private transfers[a]	43	45	45	45	50	50
(6)	Total unilateral receipts	338	315	285	265	230	190
(7)	Private foreign investment[b]	54	65	65	65	65	65
(8)	less Investments abroad	-8	-12	-15	-18	-20	-22
(9)	Net foreign investment[c]	46	53	50	47	45	43
(10)	Independence and Development Bonds[d]	63	66	68	71	72	76
(11)	Agricultural surpluses	26	28	25	25	25	25
(12)	Development Loan Fund (U.S.)	15	25	20	20	15	15
(13)	Net repayment of loans (less other loans received[e]	5	-3	-30	-50	-45	-65
(14)	Total long - and medium-term capital investments	155	169	133	113	112	94
(15)	Total inflow of capital	493	484	418	378	342	284

a/ Private transfers also include a certain amount of foreign investments

b/ Actual investment; in addition, some foreign investment is included in Private transfers.

c/ (7) less (8)

d/ Sales and cumulated interest.

e/ Includes redemption and conversion of Independence and Development Bonds.

Source: Foreign Currency Division and Budget Division, Ministry of Finance.

Table 2 gives a forecast of capital inflow by source during the years 1962 through 1966. The sources which are expected to contract are reparations and personal restitutions. Net income from sales of Independence and Development Bonds will also decrease, since the sum of redeemable bonds will increase substantially. On the other hand, the forecast assumes that U.S. assistance in the form of food surpluses and other loans will continue at least at its present level. An item of capital inflow which will increase is private investments from abroad. Parallel to this, Israel's investments in other developing countries are expected to increase; such investments help Israel exports to these countries, - exports both of commodities, and of services in the form of know-how.

According to Table 2, a continuous decline in capital inflow is expected, from about $ 500 million in 1961 to about $ 280 million in 1966. This downward trend will continue in subsequent years.

3. Agreement with the European Common Market.

The plan assumes that an arrangement will be made with the European Common Market, under which its members will refrain from imposing quota or tariff restrictions on Israel exports to the Market and to associated countries. That such an agreement should materialize is an important condition for achieving the aims of the plan for rapid economic growth and balance of payments improvement. This is because of the importance of Europe as an Israel export market at present, and more particularly for its increased exports in the future.

Just as agreement with the Common Market is one of the conditions for achieving the aims of the plan, so does the success of such an agreement depend on the ability of the Israel economy to increase its competitiveness and on the implementation of the other policies underlying the proposed plan. Any agreement which may be reached will also have a significant influence on the productive structure and on development, since it will determine the prospects of exporting to the Market, and make it necessary to adapt production for the local market to the gradual removal of import restrictions. When the nature of the arrangement to be made becomes clearer it will be possible to assess its influence on the development of the various industries.

D. The Main Principles of the Plan

The "Plan for Stabilizing the Economy" approved by the Government in February 1962 focussed on the fixing of a single realistic foreign exchange rate and provided the essential framework for future improvement in the balance of payments. But the introduction of a single rate is not alone sufficient to achieve the aims of the plan. It will be necessary to formulate suitable policies for the growth and allocation of investment, for slowing down the growth of private and public consumption, for raising productivity and efficiency, and for stabilizing demand, expenditure and price levels. These policies will be discussed later.

1. The growth of national product and its composition

The basic aims of the economic plan require national product to grow rapidly at an annual average rate of 10 per cent. This is a higher rate than found in many other countries, although it is not substantially faster than growth in Israel in previous years.

Globally, the growth of national product under the proposed plan does not depart much from past developments. The plan, however, envisages that the composition of the additional product will change considerably. Whereas, in the past, most of the additional product was used to satisfy the growing domestic consumption, in future a substantial increase in the proportion allocated to exports and import substitution will be necessary.

During the period 1955 - 1961, 90 per cent of the additional product went to private and public consumption. On the other hand, the present plan is intended to limit total consumption (private and public), to about 64 per cent of the future product increment. (See Table 3).

Table 3: The Distribution of Marginal Product, in the Past and as Planned

(per cent of marginal product, annual average)

	1955 - 1961	1961 - 1966
To private consumption	70	52
To public consumption	20	12
To gross investment	25	22
Total marginal resource use	115	86
Total marginal product	100	100
Increase in import surplus	15	-14

Source: Bank of Israel, Central Bureau of Statistics, and Table 11.

The industry composition of the additional product will be determined by domestic and foreign demand. The anticipated addition to domestic demand will not, of course, be distributed equally among all branches, but will reflect the elasticity of demand for the product of each industry. Some branches will grow faster than others because of the marked variations in the expenditure elasticity of the various products.

Export opportunities are an additional factor which will determine how fast product will grow in each industry.

The implementation of the plan will require manufacturing and transportation to grow very rapidly, since manufacturing, shipping, and tourism will have to provide most of the additional exports necessary to reduce the import surplus. The expansion of agricultural production will be limited by the relatively slow growth of local demand for agricultural products and by export opportunities. On the other hand, construction will have to grow more slowly. Most of the additional dwelling construction will be for new immigrants, and other housing construction should not expand.

2. Additional factors of production, and raising productivity

The extent to which the national product can be increased is determined by the addition of new factors of production, namely, manpower and capital, and by the increase in the productivity of the existing factors. As stated above, about half of the additional product will result from the increase in the number of workers and the other half from increasing average capital investment and productivity.

In regard to these factors, the plan rests on the following principles:

(a) Man-power and employment

The plan is based on a net annual increase in population (immigration less emigration, plus natural increase) of 110,000 persons, or about 4.5 per cent.

In addition to the increase in the labour force as a result of population growth, there was in the past a slight tendency for the labour force participation rate to increase, owing to a rise in the proportion of working women; the average number of hours worked also rose. Under a policy of full employment, it is assumed that this tendency will continue. The number of persons employed is expected to increase at an annual rate of 4.5 to 5 per cent on the basis of the increase in population and in the labour force participation rate. There will thus be a labour force of about 925,000 in 1966.

This increase in employment is expected to contribute about 5 per cent per annum to the increase in national product; this assumes that the product of new workers will, after a short period of training, be equal to the average product of other workers.

The rapid increase in production as well as the absorption into the labour force of additional manpower from immigration and natural increase, require the allocation and vocational training of manpower according to the needs of economic development. The Ministry of Labour, in co-operation with other ministries, is currently formulating plans for an expansion of government activity in this field.

(b) Investment

In addition to the increase in product resulting from the increase in the number of persons employed, the plan aims at raising product per worker through increased investment.

The increase in national product described in section 1, will, of course, require additional investment. In recent years total investment (excluding ships and aircraft) has grown at the same rate as national product.

According to a preliminary estimate, an average annual rate of about 10 per cent is required for investment (excluding ships and aircraft), which will thus increase from IL 1,475 million (at 1962 prices) in 1961 to about IL 2,340 million in 1966.

Total investments will grow more slowly, by about 8 per cent each year on the average, since average annual investment in ships and aircraft will be lower than it was in 1961.

The volume of investment required for each branch is to a large extent determined by the anticipated growth in its product. However, this is only one of the factors influencing the volume of investment required by each branch, since, in some cases - including old-established agriculture and some industry branches - there is surplus productive capacity so that production can be expanded without heavy investments.

There are also substantial differences in capital intensity (capital-product ratio) between branches. It will be possible to determine the volume of investment planned in each branch only after branch development plans have been worked out in detail and priorities have been determined.

Increased investment, at a time when the import surplus is being reduced, depends on an increased rate of saving. This matter will be discussed in section 5.

A realistic single exchange rate and the curtailment of protection for local products will make it possible to give greater weight to the profitability of investments to the national economy when determining priorities. A considerable part of planning activity will in future be devoted to determining investment priorities according to national economic criteria.

(c) Increasing productivity

The planned growth in national product will not materialize unless there is a substantial rise in productivity.

An increase in product per capita and a reduction in the balance of payments gap demand a substantial rise in productivity, or, in other words, in the efficient use of factors of production, i.e., capital and labour. The plan takes into account that productivity will rise annually by 3 per cent.

This is a higher rate than the average of 2.2 per cent per annum which obtained in the past[1/]. Further, it must be stressed that the initial level of productivity was very low, so that little effort was required to raise it. The number of workers and enterprises rose very fast and the experience gained by them was reflected in increased productivity.

In the future it will be necessary to increase productivity at a higher rate than in the past. Such an increase will require various measures for improving the efficiency of organizational, management and working methods of enterprises and services. The principal means of achieving this is to increase economic competition by abolishing excessive protection for local products and by taking action against cartels and monopolies which obstruct price reductions.

Real wage and profit rates cannot be permitted to grow faster than productivity. Wage drift increases (resulting from promotion, seniority and family allowances, etc.) and increased profit rates should be taken into account in the calculation of real income increase.

1/ See A.L. Gaathon, Capital Stock, Employment and Output in Israel, 1950 - 1959, Bank of Israel, Special Studies No. 1 Jerusalem 1961.

3. Private consumption

Additional private consumption is calculated as a residual, after deducting the increment in public consumption and in required investment from the additional resources at the disposal of the economy (i.e. additional product and import surplus).

The gradual closing of the gap in the balance of goods and services therefore requires per capita private consumption to grow more slowly than in the past and to be kept to an average rate of 2.5 per cent per annum. Private consumption is also expected to grow a further 4.5 per cent per annum because of population growth. Aggregate private consumption will thus grow by 7.5 per cent annually.

The proposed rate of growth in per capita private consumption is about half that which obtained in the period 1955 through 1961.

If consumption is to be increased faster than the average at lower income levels, it will, of course, be necessary to take steps to limit even further the increase in consumption at middle and upper income levels.

The proposed 2.5 per cent annual rate of growth of per capita private consumption approximates the average rate found in most Western European countries and in Canada in the period 1950 to 1960; this decade is regarded as a period of prosperity and of rapidly rising standards of living (see Table 4). It should be pointed out that, at times when the various countries took special steps to promote economic progress, the rise in their standard of living was slowed down or halted (see Table 4), and there are even instances of a decline in the level of consumption. An example of this is provided by France in 1958 and 1959 when devaluation of the franc took place.

Table 4: Private Consumption per capita in Selected Western European and North American Countries

(per cent change over preceding year)

	Belgium	United States	United Kingdom	Norway	Denmark	Canada	Nether-lands	France	Italy	West Germany	Israel
1952	0.4	0.7	-1.0	3.5	-1.0	6.4	-0.5	2.0	3.5	6.8	-1.0
1953	0.5	2.9	3.7	2.9	3.5	2.8	4.7	3.9	7.4	10.0	0.8
1954	3.1	-0.5	4.1	2.6	4.9	-0.7	5.7	2.9	1.5	6.0	18.3
1955	3.6	5.6	2.9	2.2	-1.8	5.2	6.0	[illegible]	3.3	8.4	4.0
1956	2.5	1.3	0.2	1.9	1.9	4.0	7.5	5.5	4.0	8.0	3.6
1957	1.9	0.8	1.6	0.9	2.7	1.0	-1.3	4.9	4.0	4.5	2.2
1958	-3.2	-0.8	0.5	0.6	3.0	-	-0.7	-0.9	2.5	3.5	5.9
1959	4.4	3.9	5.1	3.3	6.1	2.0	1.7	-0.2	4.5	4.5	6.1
Average 1951-59	1.6	1.7	2.1	2.2	2.4	2.6	2.9	2.9	3.8	6.5	5.0

Sources: Israel - D. Patinkin, The Israel Economy: The First Decade, Falk Project for Economic Research in Israel, Jerusalem 1960; and Bank of Israel, Annual Report 1961.

Other Countries - U.N., Yearbooks of National Accounts Statistics, 1958, 1959 (New York, 1959, 1960)

U.N., Demographic Yearbook, 1959 (New York, 1960).

The slowing down of private consumption growth at a time when production is rising rapidly will be achieved mainly by raising saving in its various forms. If private saving does not increase sufficiently, it will become necessary to impose a high level of taxation, particularly direct taxation.

4. Public consumption

The growth of public consumption must be reduced to an average 6 per cent per annum (or 1.5 per cent per capita), in order to achieve the aims of the plan. In this case also the plan provides for slowing down the growth of per capita public consumption.

The 6 per cent per annum rate takes account of the rising trend of defence expenditures and interest payments; and - in view of population growth - increases in expenditures provided for by existing laws are also taken into account. The rate does not allow for public services to expand beyond what is required by the increase in population.

From 1958 through 1961 per capita public consumption increased by an annual average of 6 per cent, of which more than half represented defence expenditures.

Defence expenditures are a heavy item of public consumption. If this item has to be increased more rapidly than was assumed, it would become necessary to "freeze" other public consumption expenditures and even to reduce the per capita outlay on social services; or alternatively to fix a lower rate of private consumption growth than that given here.

Similarly, a rapid rise in public expenditure on education - which for both social and economic reasons is an important aim in itself - would require measures to restrict the growth of other items of public or private consumption.

Restricting the growth in public consumption will also require a strict policy regarding wage increases of public employees.

A program for the increase in public consumption during the four years covered by the plan will be worked out in detail by the Budget Division.

5. The savings rate

One of the decisive factors in the plan is an increase in the rate of saving. By 1966, savings will have to finance about half of the economy's net investment, whereas at present (see Table 5), domestic savings do not in the aggregate contribute at all to investment financing.

Total saving (private and public) has until now been very low. At the previous exchange rate, the national accounts showed a small positive saving, but when the accounts are revalued at the new rate, total savings are still negative. This is because, at the present rate, the value of capital imports is greater relative to the national product, while the share of investments remains almost unchanged. Revaluation at the new rate increases private and public consumption and depreciation more than national product, as shown in Table 6.

The present evaluation of the volume of saving is certainly somewhat under-estimated since, owing to lack of data, increases in stocks, which appear to have been substantial in 1961, were not included in investment. The inclusion of stock changes in the investment estimate would reduce the negative saving

Table 5: The Financing of Net Investment, 1961 and 1966
(Millions of 1962 IL)

		1961	1966
(1)	Saving	-107	[illegible]
(2)	Import surplus	1,227	750
(3)	Net investment	1,120	1,526
(4)	Domestic saving as per cent of net investment	-9.6	[illegible].9

Source: Tables 6 and 11.

Table 6: The Required Development of Saving (Public and Private) 1962 - 1966

(IL millions)

		At current prices[a]	At expected 1962 prices					
		1961	1961	1962	1963	1964	1965	1966
(1)	Gross national product	5,311	5,760	6,301	6,900	7,568	8,309	9,144
(2)	Depreciation[b]	430	542	599	656	719	789	869
(3)	Net national product	4,881	5,218	5,702	6,244	6,849	7,520	8,275
(4)	Private consumption	3,686	4,120	4,435	4,770	5,124	5,494	5,886
(5)	Public consumption	1,043	1,205	1,277	1,354	1,435	1,521	1,613
(6)	Total consumption	4,729	5,325	5,712	6,124	6,559	7,015	7,499
(7)	Saving	152	-107	-10	120	290	505	776
(8)	Saving as per cent of net national product	3.1	-2.0	-0.2	1.9	4.2	6.7	9.4

a/ At the $ 1 = IL 1.80 exchange rate.

b/ Depreciation 1962 - 1966 was estimated as 9½ per cent of GNP, on the basis of the 1961 figure at 1962 prices, i.e., at the new exchange rate.

Source: Table 11.

figure. Moreover, part of private consumption was made possible through private transfers from abroad, and thus appears as negative private saving under the definitions used here.

Owing to these and other factors, the calculation, which showed a negative saving in the year 1961, should be regarded as having a downward bias.

Total saving comprises household and business saving, on the one hand, and the saving of public institutions, on the other. There was some positive household saving whereas saving by public institutions was markedly negative. This negative public saving by institutions (such as the Jewish Agency, Hadassah and Malben) is accounted for by the fact that their revenues derive from abroad, while a substantial part of their expenditures is for consumption rather than for investment. This phenomenon is of greater importance at the new than at the old exchange rate.

A considerable increase in savings during the coming years is required by the plan. With a rapidly growing national product it is not possible to devote a large part of the product increment to development and to improving the balance of payments, unless the rate of saving rises. The rapid increase in product in itself means that there is a marked increase in real factor income - the income of wage earners, self-employed and employers. It will be impossible to prevent a considerable increase in private consumption as a result of the increased incomes, without a striking rise in the savings rate.

According to the plan the government will take far-reaching measures to encourage saving; such measures include maintaining the real value of savings, and the payment of a liberal interest rate to savers. If voluntary saving in its various forms does not increase at the required rate, it will be necessary

Table 7: The Savings Rate in Various Countries

	U.S.A.	West Germany	United Kingdom	France	Italy	Israel
Saving as per cent of net national product						
1959	7.4	20.5	10.1	11.9	14.6	..
1960	9.4	21.1	9.3	11.9	15.8	-2.0 b/
National income per capita ($) a/						
1959	2,200	913	1,019	875	457	676 b/

a/ Converted from local currencies at official exchange rates

b/ 1961, at 1962 prices

Source: Israel - Table 6
Other countries - U.N., Yearbook of National Accounts Statistics, 1960, New York, 1961
U.N., Statistical Yearbook, 1960, New York, 1961

to create government saving, by diverting part of the ordinary tax revenues to development financing or by "sterilizing" it.

Although a substantial increase in the rate of saving is required, it must be pointed out that the rate proposed at the end of the period covered by the plan is similar to the rate of saving found in other countries, such as Great Britain and the United States. On the other hand, it is lower than the rate in countries such as Italy and West Germany (see Table 7).

6. The balance of payments

One of the central aims of the proposed plan is the reduction of the import surplus from $ 400 million in 1961 to $ 250 million in 1966. The import and export developments required by these aims are discussed in this section, and summarized in Table 8.

(a) The volume of imports

Rapid economic growth will in itself require a substantial increase in imports of raw materials, consumer and investment goods. The especially rapid growth of production in branches, such as manufacturing and transportation, in which the import component is relatively high, as well as the need for heavy investments (which have a high import component), will further raise import requirements. If imports are not to increase very rapidly, it will be necessary to replace a part of them by local products; this must be done in those industries whose prices can compete with prices abroad, and first and foremost - in the production of equipment. The new exchange rate should help to achieve this aim.

Table 8: The Development of Exports, Imports, and Import Surplus according to the Proposed Plan, 1961 - 1966

	1961	1966	Average annual increase
	($ millions)		(per cent)
Imports a/	820	1,273	9.2
Exports	411	1,023	20.0
Import surplus	409	250	-9.4

a/ Includes ships and aircraft ($ 62 million in 1961, $ 18 million in 1966)

Source: 1961 - Central Bureau of Statistics and Bank of Israel

1966 - Table 11; see also Appendix B.

The policy of curtailing protection of local products may, admittedly, lead to an increase in imports of cetain commodities. But, under the prevailing conditions of full employment, which are to continue, it is to be expected that the resultant loss in terms of increased imports will be compensated for by the transfer of factors of production from products whose prices (compared to prices abroad) are very high, to other products which can be competitively exported. This entails making suitable arrangements for the transfer of workers from contracting lines of production to those which will expand. Ultimately, this process will improve the balance of payments.

An estimate of import requirements within the framework of these proposals calls for import substitution on an increasing scale, until a net total of $ 68 million is reached in 1966. The projected development of imports, by economic destination, is shown in Table 9.

From the balance of payments standpoint, import substitution is an alternative to increasing exports. A lower import substitution would require exports to increase more rapidly than is assumed in the plan, and vice versa.

(b) The growth of exports

The increase required in the level of exports is determined, on the one hand, by import requirements and, on the other, by anticipated capital inflow. Future import requirements will be considerable while capital inflow is expected to decline; the plan must therefore provide for the rapid expansion of exports.

With the decline in the growth-rate of private and public consumption exports will have to expand rapidly, not only in order to finance the required imports but also to assure the rapid growth of production and employment.

Table 9: The Destination of Imports according to the Plan
1961 - 1966

	1961	1966	1961	1966
	($ million)		(per cent)	
(1) for Private consumption	259	356	31.6	28.0
(2) for Public consumption	85	114	10.3	8.9
(3) Total consumption	344	470	41.9	36.9
(4) for Gross Investment (excluding ships and aircraft)	(212)		(25.8)	
(5) Ships and aircraft	(62)		(7.6)	
(6) Total gross investment	274	313	33.4	24.6
(7) for Exports	202	490	24.7	38.5
(8) Total uses	820	1,273	100.0	100.0

Source: 1961 - Central Bureau of Statistics and Bank of Israel
1966 - Table 11; see also Appendix B.

Exports must rise by about 20 per cent per annum, in order to achieve the aims of the plan; this was the average rate of increase in the period 1955 through 1961.

The expected main-branch distribution of exports, assuming that total exports do in fact rise as planned, is shown in Table 10.

Estimates currently available from government departments indicate a somewhat slower export growth rate than that required by the plan. It will therefore be necessary to re-examine the means of achieving the required export growth.

The continued increase in exports at the high rate which obtained in the past depends on several factors:

i. Greater efficiency and a rapid rise of productivity in the export branches.

ii. The prevention of production-cost rises by means of wage and profit restraint.

iii. The prevention of a boom in local demand, which would have an adverse effect on the profitability of exports, relative to the profitability of local sales.

iv. The provision of efficient organization of exports and marketing, and intensive market research.

Each of these points will be examined in detail in the course of working out the plan.

A further condition for raising exports is, as has been stated, a satisfactory arrangement with the European Common Market.

Table 10: The Development of Exports according to the Proposed Plan, 1962 to 1966
(£ million)

	1961	1966	Average annual increase (per cent)
Citrus[a]	40	76	14
Other agricultural exports[b]	22	36	10
Total agricultural exports	62	112	12½
Diamonds	64	103	10
Other industrial exports	102	255	20
Total industrial exports	166	358	16½
Miscellaneous	7	12	13
Total exports of merchandise	235	482	15½
Tourism	30	85	23½
Shipping and aviation	83	286	28
Other services	63	170	22
Total exports of services	176	541	25
Total exports	411	1,023	20

a/ This estimate represents the increase in the volume of exports, on the assumption that the average price of citrus in foreign markets will decline because of the increased volume supplied by the Mediteranean region.

b/ A decline in the export of eggs has been taken into account.

Source: 1961 - Central Bureau of Statistics and Bank of Israel
1966 - Table 11; see also Appendix B.

7. The prevention of inflation and the stabilization of prices

The achievement of a rapid rise in exports and import substitution, together with restricted growth in private consumption and increased private saving, will require anti-inflationary policies both on the demand and the costs side.

There is a serious danger of inflation, particularly in the initial years of the plan, owing to the expected rise in foreign exchange reserves and conversions into Israel currency, and owing to the effects of devaluation. It will be necessary to take a series of anti-inflationary measures, such as those enumerated in the report of the Minister of Finance to the Knesset on 16.5.62.

Government policy must be on the following lines during the entire period of the plan :

a. The means of payment should expand at a rate which does not exceed the rate of national product growth (provided that there is no change in velocity of circulation). Most of the addition to the means of payment in the next few years will come from foreign exchange conversions.

b. A wage and profit policy designed to prevent a rise in production costs.

8. Estimates of resources and uses

The fundamental outlines of the plan, as expressed in the development of resources and their uses, are summarized in Table 11. The year-to-year movements are of secondary importance and are intended only to indicate the average orders of magnitude throughout the period. (All calculations have been made at expected 1962 prices).

Table 11: Resources and Uses according to the Principles of the Proposed Plan

		1961	1962	1963	1964	1965	1966	Average annual increase (per cent)	
		(millions of 1962 IL a/)						aggregate	per capita
(1)	Gross national product	5,760	6,301	6,900	7,568	8,309	9,144	9.7	5.0
(2)	plus Imports b/	2,460	2,594	2,988	2,113	3,453	3,818	9.2	4.5
(3)	less Exports	-1,233	-1,480	-1,775	-2,131	-2,557	-3,068	20.0	
(4)	Total resources at the disposal of the economy	6,987	7,415	8,113	8,550	9,205	9,894	7.2	2.6
(5)	Private consumption	4,120	4,435	4,770	5,124	5,494	5,886	7.4	2.8
(6)	Public consumption	1,205	1,277	1,354	1,435	1,521	1,613	6.0	1.5
(7)	Gross investment	1,662	1,703	1,989	1,991	2,190	2,395	7.6	3.0
(8)	Total use of resouces at the disposal of the economy	6,987	7,415	8,113	8,550	9,205	9,894	7.2	2.6

a/ Expected 1962 prices, derived from the calculations of A.L. Gaathon.

b/ Including imports of ships and aircraft.

Source: 1961 - Central Bureau of Statistics and Bank of Israel.

1962 - See Appendix B.

APPENDIX A.

Economic Developments Expected on the basis of Past Trends

The plan's primary objectives, as outlined in section B of these proposals, require the growth of private and public consumption to be markedly slowed down. This is to be achieved by raising savings and by enhancing the competitiveness of the economy as a means to fast growth in exports and import substitution. It is clear that the attainment of these aims depends on the success of the government policies directed towards them.

It may be asked what is to be expected if some of the plan's basic principles are not implemented; in particular, if there is no slowing down in the growth of private and public consumption. An answer to this question appears in Tables 12 and 13, which show the probable development of the balance of payments if private and public consumption continue to grow at same rate as in the past (i.e., private consumption per capita at about 5 per cent per annum, and public consumption per capita at about 4.3 per cent per annum). All other assumptions are those of the proposed plan: an annual increase in population of 110,000, investment rising at the same rate as national product, etc.

The following conclusions may be drawn from Tables 12 and 13:

a. Imports are liable to increase by 9.3 per cent per annum, reaching a total of $ 1,277 million in 1966.

b. Exports will increase by only 15 per cent per annum, instead of the 20 per cent aimed at by the plan, and will reach only $ 822 million in 1966.

Table 12: Economic Developments Expected on the basis of Past Trends:
Resources and Uses

		1961	1962	1963	1964	1965	1966	Average annual increase (per cent)	
		(millions of 1962 IL a/)						aggregate	per capita
(1)	Gross national product	5,760	6,363	7,028	7,758	8,553	9,429	10.4	5.6
(2)	plus Imports b/	2,460	2,587	2,977	3,101	3,448	3,831	9.3	4.6
(3)	less Exports	-1,233	-1,403	-1,605	-1,843	-2,127	-2,465	14.9	
(4)	Total resouces at the disposal of the economy	6,987	7,547	8,400	9,016	9,874	10,795	9.1	4.4
(5)	Private consumption	4,120	4,521	4,956	5,427	5,932	6,478	9.5	4.8
(6)	Public consumption	1,205	1,316	1,436	1,565	1,702	1,850	8.9	4.3
(7)	Gross investment	1,662	1,710	2,008	2,024	2,240	2,467	8.2	3.6
(8)	Total use of resources at the disposal of the economy.	6,987	7,547	8,400	9,016	9,874	10,795	9.1	4.4

a/ Expected 1962 prices, derived from the calculations of A.L. Gaathon.

b/ Including imports of ships and aircraft.

Source: 1961 - Central Bureau of Statistics and Bank of Israel.
1962 - See Appendix B.

Table 13: Economic Development Expected on the Basis of Past Trends: Exports, Imports, and Import Surplus

	1961	1966	Average annual increase
	(£ millions)		(per cent)
Imports a/	820	1,277	9.3
Exports	411	822	14.9
Import surplus	409	455	2.2

a/ Including ships and aircraft

Source: 1961 - Central Bureau of Statistics
1966 - See Appendix B.

c. The import surplus is likely to increase from about $ 400 million in 1961, to $ 455 million in 1966, instead of declining to the $ 250 million aimed at by the plan.

d. If capital inflow conforms to the forecast in Table 2, foreign exchange reserves are expected to contract in 1963 and 1964; this trend will be even more pronounced in 1965 and 1966.

e. The growth of private and public consumption and of investments would require product to grow at a higher rate than appears feasible and this might result in imports exceeding the present import components.

This possibility clearly indicates that future government policy must focus on efforts to restrict the growth rate of private and public consumption, to increase savings and to implement the other principal proposals of this outline.

APPENDIX B.

Assumption and Methods

A. The Process of Planning

All development planning is carried out in several stages, of which the first is to determine the economy's development aims. These aims and the policies required for their fulfilment must first be approved; the detailed industry plans are then examined in the light of the desired objectives, and means of executing them are formulated. At the final stage, the separate plans and means of implementation are fitted into the overall framework, and, as a result the detailed plan emerges.

The preparation of the plan is a simultaneous process of examining the internal consistency of the various objectives and the means achieving them. From the working-method point of view, the process is rather like solving a crossword puzzle. The final stage of planning is a continuous process of examining and reconciling the economic policies in each sphere. It is therefore of great importance to stress, within the framework of a comprehensive development plan, that the developments in separate spheres of economic policy affect one another.

This memorandum presents proposals for determining aims and policies and represents, as stated, the first stage of planning. When this stage has been approved, it will be possible to start working out the details, by preparing branch development plans.

Any development plan must distinguish between three kinds of quantitative data:

a. Fundamental exogenous factors: i.e., developments which are in the main determined by political and social considerations and not by economic policy, but which nevertheless significantly affect the economy. In our own case, the anticipated volume of immigration and capital inflow, defence requirements, etc., fall into this category.

b. The aims of the plan

c. The main outline of the means of implementing the aims.

The pricipal data are described in the text.

B. The Problem and its Solution in Principle

1. General

The question to be answered was: what is the maximun permissible growth in consumption, and how fast must exports - or import substitution - rise in order to reduce the import surplus to $ 250 million in 1966. In principle, this may be achieved by increasing domestic saving so that it will replace the import surplus in financing investment, or by slowing down the growth of the economy. The present plan is based on the first line of approach - to increase savings. To provide the framework, we first estimated the possible growth of resources at the disposal of the economy and then allocated these resources to the various uses: private consumption was the residual, after investment and public consumption were provided for. (It would of course have been possible to reverse this order and to derive public consumption as a residual after allowing for private consumption to grow at any desired rate).

2. The factors of production and the resources at the disposal of the economy

(a) It was assumed that the population will grow as the result of an annual net immigration of 60,000 (i.e. immigrants less emigrants), as well as through natural increase. It was also assumed, as a first approximation, that the civilian labour force will grow at the same rate as population, i.e. at an annual average rate of 4.5 per cent[1/].

(b) It was assumed that average per capita product will increase at the same rate as in the past, by 5 per cent each year; in other words, the increase in the amount of capital invested per worker will be sufficient to account for the same proportion of additional per capita product as in the past; it was also assumed that productivity will continue to increase[2/].

(c) The expected average annual rate of increase in gross national product, of 9.7 per cent, is derived from the assumptions enumerated.

(d) The resources at the disposal of the economy for private and public consumption and for investment consist of the gross national product and the import surplus. The reduction of the import surplus to $ 250 million at the end of the period covered by the plan, and the feasible rate of product growth will thus determine total resources at the disposal of the economy in 1966[3/].

1/ The increase in each year will be smaller than that of the preceding year, dropping from 4.7 per cent in 1962 to 4.2 per cent in 1966, because of the decline in the proportion of immigrants in the additional population.

2/ If productivity does not increase it will be necessary, in order to achieve this growth in per capita product, to invest more than has been assumed here. On the other hand, there is an implicit assumption in what has here been said that increasing investment will not increase the average product substantially faster than in the past.

3/ If Israel's terms of trade deteriorate (i.e., if export prices decline or if import prices rise), the resources at the disposal of the economy in 1966 will be lower than those derived from the constant price assumption. If there is a drop in export prices an increasing volume of goods and services must be exported in order to earn the same foreign exchange revenue; and if import prices rise the economy will obtain a smaller quantity of goods and sevices for the same foreign exchange expenditure. See also the discussion of prices in section 3 of this Appendix.

3. Use of resources

(a) It was assumed that gross investment must increase at the same rate as the product in order to achieve the given rate of product growth. The significance of this assumption, which is based on past experience, will be discussed later at greater length.

(b) It was assumed, on the basis of existing public expenditure plans, that it will be possible to restrict the growth of total public consumption to a rate of 6 per cent per annum, or 1.5 per cent per capita.

(c) The amount available for private consumption in 1966 will, therefore, be the residual after gross investment and public consumption have been deducted from total resources at the disposal of the economy. The average annual growth rate of total and per capita private consumption is then calculated by comparing this amount with private consumption in the base year 1961.

4. Imports and exports

(a) The volume of imports is determined by the magnitude of each use and by its import component. As a first approximation it was assumed that the import component will remain unchanged, i.e. that there will be no import substitution.

(b) The planned 1966 figure for each use (except exports) is known at this stage. Assuming that there is no import substitution, exports must equal imports less the import surplus allowed for in the plan. The export and import amounts are thus simultaneously determined by the amount and import component of all other uses and by the import component of exports. As in the case of private consumption, a comparison of exports required in 1966 with the base year exports makes it possible to calculate the average annual growth rate.

5. Algebraic formulation

(a) The following symbols are used (for the year t):

Population	P_t
Gross national product	V_t
Gross investment	I_t
Public consumption	G_t
Private consumption	C_t
Imports	M_t
Exports	X_t
Import surplus	F_t

so that $F_t = M_t - X_t$, and total resources at the disposal of the economy are $V_t + F_t = I_t + G_t + C_t$.

The import components of (e.g.) gross investment and public consumption are represented by m_I and m_G respectively; the annual rate of population growth is r_p and the annual rate of growth of gross national product is r_V (with $\bar{r}$ representing the average annual rate).

(b) The following formulas can thus be set up for 1966:

For gross national product:

$$V_{66} = \left[\frac{V_{61}}{P_{61}} \cdot (1+\bar{r}_V)^5 \cdot \frac{V}{P} \right] \cdot \left[P_{61}(1+\bar{r}_P)^5 \right] = V_{61}\,(1+\bar{r}_V)^5$$

For resources at the disposal of the economy: $V_{61}\,(1+\bar{r}_V)^5 + \bar{F}_{66}$, (when $\bar{F}_{66}$ is the import surplus given as the plan's target).

On the resource-use side -

Gross investment: $I_{66} = I_{61}(1+\bar{r}_V)^5$, since it was assumed that $\bar{r}_V = \bar{r}_I$

Public consumption : $G_{66} = G_{61}(1+\bar{r}_G)^5$

It follows that private consumption is derived as :

$$C_{66} = \left[V_{61}\ (1+\bar{r}_V)^5 + \bar{F}_{66}\right] - \left[I_{61}\ (1+\bar{r}_V)^5\right] - \left[G_{61}\ (1+\bar{r}_G)^5\right]$$

(c) Imports are defined as:

$$M_{66} = m_C\ C_{66} + m_G\ G_{66} + m_I\ I_{66} + m_x\ X_{66}$$

and the required exports are defined as:

$$X_{66} = M_{66} - \bar{F}_{66}$$

by substituting we obtain:

$$X_{66} = \frac{1}{1 - m_x}\left[m_C\ C_{66} + m_G\ G_{66} + m_I\ I_{66} - \bar{F}_{66}\right]$$

6. At this stage of planning, timing was not taken into consideration but it was assumed that the various developments would be gradual throughout the period. The average annual rates of growth were calculated when private consumption and exports had been estimated for 1966. Resources at the disposal of the economy and their uses in each of the years covered by the plan were calculated by applying these growth rates (and those assumed for public consumption and investment to the figure for each year, starting from the base year 1961.

C. Notes on Specific Problems.

1. Investment in ships and aircraft

(a) In 1961, which was the base-year of the plan, gross investment exceeded the requirements of product growth, owing to heavy investment in ships and aircraft (which amounted to about one tenth of total investment). Since investments of this type are decided upon several years before being made, it was assumed that purchases of ships and aircraft during the period of the plan will correspond to existing plans and to orders already placed for those years. Accordingly, investment in ships and aircraft was deducted from the total gross investment in the base year; the assumption that investments and product must grow at the same rate was applied only to this reduced sum. Total gross investment shown in the plan for each year consists, therefore, of gross investment other than ships and aircraft (increasing at an average annual rate of 9.7 per cent from the base-year) plus purchases of ships and aircraft planned for each year, as shown in Table 14.

Table 14: Gross Investment, 1962 to 1966
(millions of 1962 IL)

	1961	1962	1963	1964	1965	1966
Gross investment (excluding ships and aircraft)	1,475	1,622	1,781	1,954	2,140	2,342
Ships and aircraft	187	81	208	37	50	53
Total gross investment	1,662	1,703	1,989	1,991	2,190	2,395

(b) The item "ships and aircraft" all of which is imported, also raised the 1961 import component of investments over the level to be expected in future. The import component was, therefore, calculated after deducting imports of ships and aircraft from total investment imports in the base year. Imports for investment were thus estimated according to the base-year import component of investment (excluding ships and aircraft) plus planned purchases in ships and aircraft (see also Table 9).

2. The growth of exports and import substitution

(a) The plan's aims would require exports to increase at an average annual rate of about 23% on the assumptions so far made. This rate appears to be higher than can be achieved even if all possible export promotion measures are taken. On the other hand it is to be expected that some import substitution, which has not so far been taken into account, will take place. The import substitution required is defined as the difference between the planned amount of imports, and the amount which would be imported if the base-year import coefficients did not change. The substitution in each year was calculated as the difference between (a) the import surplus resulting from an annual 23 per cent rise in exports, and (b) the import surplus which would result (in the absence of import substitution) when exports grow by only the planned 20 per cent each year. The additional substitution required if exports fall short of the plan target can be calculated in the same way.

(b) Import substitution was somewhat arbitrarily allocated to each use. The allocation is based on developments expected to occur in certain industries following devaluation, rather than on past experience. It was assumed that a decline in the import component of gross investment would account for 60 per cent of the annual amount of import substitution, while the remaining 40 per cent would be divided equally between consumer and export goods.

(c) The industrial origin of additional exports has been arrived at by taking account of existing export plans, since quite a number of branches will be unable to raise exports above the levels already planned. To the extent that exports of such branches grow at a rate lower than the planned average rate, exports of other industries must increase at a higher rate.

(b) However, if the exports of each industry do in fact conform to the proposal, the plan's target can be achieved with exports growing more slowly, on the average, than planned. This is due to the decline of the import component in exports. (See section 5(b), page 50.)

3. Prices

(a) The data of the outline plan are presented at constant prices, i.e., at expected 1962 prices. The need to use an estimated price level arises, of course, from the special conditions of the period during which this outline was prepared; it was pointless to make the calculations in terms of a relative price structure which, since devaluation, no longer exists.

(b) The current year's average price level was taken to be that expected in the second half of the year after payment of the Cost-of-Living allowance in July. The effect on the price level of both devaluation and the expected Cost-of-Living allowance was estimated on the basis of A.L. Gaathon's calculations. It must be pointed out that these calculations ignore the effect on prices of demand because there was no possibility of taking this factor into account; it is in effect, assumed that there has been no substitution between different expenditure items.

(c) The conversion to 1962 prices alters the amount and composition of the 1961 resources and uses. The higher valuation of the import surplus means that the small positive domestic saving is reduced to a negative figure of about 2 per cent of net national product. It may be assumad that this is an overestimate since, if 1962 relative prices had in fact obtained in 1961 a lower level of consumption could have been expected than that actually recorded.

(d) The use of constant prices takes no account of possible changes in relative prices. The only exception is exports, where it has been assumed that the prices of some products (mainly citrus) will fall. This means that a given increase in the value of exports will require a faster increase in the volume exported. In constant price terms exports must therefore rise somewhat more than indicated in the plan. From this aspect there is some inconsistency between the detailed export plan and the plan for resources and uses[1/]. However, as will be described later, this is only one of the problems of aggregation which have been ignored at this stage, the magnitudes involved being of relatively little importance.

4. The capital-product ratio and the amount of capital invested per worker

(a) The assumption that investment and product will grow at the same rate does not, of itself, give any indication of possible changes in the capital-product ratio. The development of capital intensity depends on the ratio between the rates of growth of product and of the economy's stock of capital.

When investment grows at the same rate as product, capital intensity may either increase, or decrease, or remain unchanged, according to the level of investment to which the growth rate is applied.

1/ Because of the anticipated decline in citrus prices, the export estimates presented in Table 11 somewhat understate the quantitative growth according to which future export revenues were estimated.

(b) The data on which the present plan is based ensure the maintenance of a more-or-less constant capital intensity. If future discards[1/] are allowed for the capital-product ratio (including dwellings) will remain at its present level of 2.5;

(c) The amount of capital invested per worker will, however, increase at an average annual rate of 5.2 per cent. At the end of the period covered by the plan, the amount of capital invested per worker will be 30 per cent greater than at present.

5. Aggregation problems

(a) At this stage, the various assumptions and quantitative relationships were applied to the principal national accounts aggregates only. The only exception is the separate treatment of ships and aircraft, as described earlier. The breakdown of these broad aggregates into component parts to which specific assumptions and parameters will be applied may to some extent alter the details of the plan as set out here.

(b) For example, if the industrial origin of additional exports conforms to that suggested in the plan (see Table 10), a lower rate of export growth (or less import substitution) than planned may be sufficient. This is because the proposed change in the composition of exports will in itself reduce the import component, mainly through the decline in the share of diamonds, the import

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1/ Assets withdrawn from use at the end of their useful life.

component of which is particulary high. On the other hand, there may occur within each industry, changes in the composition of exports which would tend to offset this effect. Since the export plan in only one of a series of possible plans (and as such a very tentative one), the import substitution resulting from changed composition was not taken into account in computing the required growth rate for exports.

(c) Similarly, changes in the industry structure of consumer goods might lead to changes in the import component of private consumption, perhaps, however, in the opposite direction. This possibility was also ignored at the present stage.

(d) It is likely that the most serious problem of aggregation will arise in connexion with the investment plan. Owing to substantial between-industry variations in the capital-product ratio, changes in the industry composition of investments may result in changes in the relative growth rates of product and investment.

APPENDIX C.

Alternative Assumptions of the Extent of Immigration within the Framework of the Four-year Plan

A. Introduction

1. The proposals for determining the principal aims and outline of the 1963/64 - 1966/67 development plan assumed that on the average there would be 70,000 to 72,000 immigrants each year[1] ; this is equivalent to a net annual immigration (less emigration) of 60,000. Immigration is one of the variable factors over which the government's economic policy has no direct control, and in the extent of which unexpected changes are likely to occur. Two alternative assumptions were, therefore, set up in order to determine how the proposed plan would - on the average for the whole period - be affected by variations in the volume of immigration. An upper limit of 100,000 and a lower limit of 40,000 gross annual immigration were taken[2].

2. It would probably be more realistic to assume that immigration will not be the same is each year; however, year-to-year variations have not been taken into account at this stage of planning. When plans are prepared for each year within the overall program, it will, of course, be necessary to take account of the most recent information on the volume of immigration in each year.

1/ In the subsequent analysis this variant is referred to as "the plan", to distinguish it from the other variants to be discussed here.

2/ For each variant it was assumed that there would be 10,000 to 12,000 emigrants each year. It is likely that, in practice, at periods of high immigration emigration will also be higher, but the difference is not likely to be great.

3. In the following analysis the basic aims underlying the plan have not been changed. In other words, the basic development principles of achieving rapid economic growth and the gradual decline of the import surplus to $ 250 million in 1966, are assumed to hold good at all levels of immigration.

4. The central conclusion drawn from this analysis is that the volume of immigration has a marked effect on the overall rate of economic growth, on the volume of investment required, and on the required growth in exports.

However, the volume of immigration does not affect the need to restrain the rise in private consumption to a maximum average annual rate of 2.5 to 3 per cent per capita, and to restrict the rise in total public consumption.

B. Changes to the plan under the 40,000 per annum immigration assumption

1. With a gross annual immigration of 40,000, population will increase by an average 3.2 (4.5[1/]) per cent each year; the population will therefore be 2.6 million by the end of 1966.

2. The growth of the national product derives from three sources: the increase in employed manpower, the increase in capital per worker, and higher productivity. In the plan it was assumed that the additional capital invested per worker and increases in productivity would enable average product per worker to grow by 5 per cent each year. This is, therefore, the rate at which total product would grow if the number of persons employed did not increase. With immigration reduced to 40,000 per annum, a rise in employed labour force equal to the rise in population will enable product to grow at an annual average rate of 8.5 (9.5) per cent.

1/ The comparable figures (based on an annual immigration of 70,000) used in the plan, are given in brackets following the corresponding figures for the variant discussed.

3. In the plan it was assumed that gross investment[1] must increase at the same rate as product. With product increasing more slowly, less investemat will be required. At the 40,000 level of annual immigration, gross investment (including ships and aircraft) is required to grow by about 6.5 per cent (8 per cent) each year. Accordingly gross investment will reach IL 2,250 (IL 2,400) million in 1966. (The figures quoted here and subsequently are at 1962 prices).

4. The two factors determining the resources at the disposal of the economy in 1966 are national product growth, which is, of course, affected by the extent of immigration, and the reduction of the import surplus to $ 250 million in 1966. At the reducedlevel of immigration here discussed the resources at the disposal of the economy will be about IL 9,350 (IL 9,900) million, compared to about IL 7,000 million in 1961, representing an annual average rate of growth of 6 per cent (7.2 per cent).

5. The relative expansion of the different branches will be somewhat different from that forecast in the plan. This will be reflected principally in a relatively slower growth in construction, owing to the lower requirements of immigrant housing. The industry composition will also be affected by the slower growth of exports.

6. Public consumption does not in the main depend directly on the size of the population, which does not affect such outlays as defence, the diplomatic and consular service, and interest payments. On the other hand, in education, health, and to a lesser extent in other services, there is a direct connexion between population increase and the scope of public services. It was therefore assumed that as immigration rose public expenditures would also grow, but less than proportionately to the increase in immigration. It was assumed that, with immigration reduced to 40,000 each year, public consumption would be limited to a rate of 5 (6) per cent per annum.

1/ This refers to "ordinary" investment, excluding ships and aircraft.

7. When gross investment and public consumption are deducted from the resources at the disposal of the economy, the private consumption consistent with the aims of the plan is the residual. With immigration at the lower limit, private consumption can increase by 6 per cent (7.5 per cent) each year. A lower volume of immigration thus requires aggregate consumption to grow more slowly. On the other hand, there is almost no change in the rate of growth per capita, which does not exceed 2.5 - 3 per cent per annum at the reduced rate of immigration.

8. When there are fewer immigrants, and hence a lower rate of population increase, less additional imports are required to satisfy the same per capita investment and consumption. On the other hand, when imports are lower, a lower rate of growth of exports is required in order to reduce the import surplus to $ 250 million by 1966. Assuming that import substitution will rise gradually and reach $ 68 million in 1966, exports must rise by 18 (20) per cent each year, at the 40,000 immigrant level.

Accordingly, in 1966 total exports will be $ 930 ($ 1,020) million, and imports $ 1,180 ($ 1,270) million with an annual immigration of 40,000.

9. To summarize - when immigration is less than was assumed in the plan, product will grow more slowly; it will therefore be possible for investment and exports to rise more slowly. Although the changes in growth rates are not striking, over the four years the cumulated differences amount to considerable sums.

Nevertheless, it will be necessary - even at the lower rate of immigration - to take steps to limit the growth of private and public consumption and to raise the savings rate rapidly if the plan's targets are to be reached.

In practice, a faster increase in per capita private consumption is likely to have a greater effect on the economy than changes in the volume of immigration. Although immigrants raise private consumption without contributing to output during the initial period of absorption, their integration into the productive system ultimately speeds up the growth of gross national product.

C. Changes to the plan under the 100,000 immigrants assumption

1. At an annual level of immigration of 100,000, population will increase by 5.6 (4.5) per cent each year on the average. In this case, total population will be about 2.9 million in 1966.

It must be pointed out that during the period of mass immigration there were 240,000 immigrants in the single year 1949, and 170,000 in each of the years 1950 and 1951. Moreover, as the country's total population grows, the weight of the immigrants in this total declines: to-day, an annual immigration of 100,000 represents as addition of 45 per thousand of existing population, while in 1948, for example, a similar number of immigrants represented an addition of 177 per thousand of existing population.

2. If the number of employed persons increases at the same annual rate as population, national product will grow by 11 per cent each year, on the average; this assumes that, at the higher level of immigration also, it will be possible to achieve an annual increase in product of 5 per cent per worker, by increasing the amount of productive assets at the disposal of each worker, and by raising productivity.

3. An 11 per cent annual increase in product requires more investment than was needed at a lower level of immigration. With 100,000 immigrants each year, gross investment (including ships and aircraft) must grow by an average 9 (8) per cent per annum. By 1966, annual gross investment will exceed IL 2,500 (IL 2,400) million.

4. Keeping to the 1966 $ 250 million import surplus target, and the more rapid national product growth, means that, at a higher level of immigration, the resources at the disposal of the economy will rise by

8.2 (7.2) per cent each year. By 1966, resources will amount to IL 10,400 (IL 9,900) million compared to almost Il 7,000 million in 1961.

5. One of the effects of increased immigration will be a marked speeding up of construction, relative to other branches. The expansion of other industries will also be affected by the considerable export requirements, compared to what was needed at the 70,000 immigrant level.

6. A faster growth of population will require the expansion of public services. However, as stated in section B. of this Appendix, this addition to the public consumption increment is not proportional to the addition in the number of immigrants.

It was therefore assumed that, with an annual immigration of 100,000 public consumption would increase by an average 7 (6) per cent.

7. When investment and public consumption are deducted from the resources at the disposal of the economy the premissible rate of increase of private consumption is found to be 8.5 (7.5) per cent. However, this speeding up of the growth of aggregate private consumption, as compared to that at the 70,000 immigrant level, takes account of the faster population growth: the plan allows for a maximum annual increase of 2.5 per cent per capita at a higher volume of immigration also.

8. With more immigration, more imports will be required to supply the same per capita investment and consumption. In order to reduce the import surplus to $ 250 million by 1966, a greater immigration will therefore require exports to grow faster, by 22 (20) per cent each year.1/

1/ In both cases, the rate of growth of exports is calculated on the assumption that by 1966 net import substitution will be $ 68 million. Clearly, the greater the substitution of imports, the lower will be the rate of growth required in exports.

At the 100,000 immigrant level exports must therefore reach £ 1,100 (£ 1,020) million, while imports will be £.1,350 (£ 1,270) million, if the aims of the plan are to be achieved.

9. To summarize, if immigration is higher than was assumed, product will grow more rapidly. However, in this case a higher level of investment, savings, and exports will be required in order to fulfil the aims of the plan. Clearly, policy measures required to achieve this must be more far-reaching than would be necessary with fewer immigrants.